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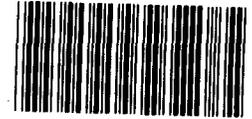
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STATEMENT OF  
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RESOURCES, COMMUNITY AND ECONOMIC DEVELOPMENT DIVISION

BEFORE THE  
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS  
OF THE  
HOUSE COMMITTEE ON ENERGY AND COMMERCE  
ON

EPA'S PROGRESS IN REGULATING  
HAZARDOUS AIR POLLUTANTS



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Mr. Chairman and members of the Subcommittee:

We are pleased to be here today to discuss our recent report<sup>1</sup> on the Environmental Protection Agency's (EPA's) procedures and problems in listing and regulating hazardous air pollutants under section 112 of the Clean Air Act.

Concerned about delays in EPA's process of examining and regulating hazardous air pollutants, the Chairman, Subcommittee on Oversight and Investigations, asked us to review several aspects of EPA's hazardous air pollutant program.

Since passage of the act in 1970, EPA has identified only seven substances as hazardous air pollutants and established emission standards for four of them. We found that various policy shifts at EPA and uncertainty over the type and amount of scientific data needed to support a regulatory action are major contributing factors to delays in identifying and regulating hazardous air pollutants.

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<sup>1</sup>Delays in EPA's Regulation of Hazardous Air Pollutants  
(GAO/RCED-83-199, August 26, 1983)

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Although our report does not contain conclusions and recommendations, at the chairman's request we have included some suggestions for improving the process of regulating hazardous air pollutants.

Perhaps the best way for me to proceed is to discuss four major questions that we addressed in our report.

--Is EPA addressing the most potentially hazardous air pollutants?

--What circumstances have led to delays in drafting health assessment documents and obtaining Science Advisory Board (SAB) approval of the documents?

--What delays has EPA experienced in setting standards after SAB review?

--Did Congress intend economic and technological feasibility to be relevant considerations when setting standards under section 112?

Let me first provide a brief background of the process that EPA has established to regulate hazardous air pollutants and then I will discuss each of these issues in more detail.

#### BACKGROUND

Section 112 of the Clean Air Act requires that EPA develop standards to control emissions of hazardous air pollutants. This section is designed to protect the public from air pollutants which are not regulated under other sections of the act and which EPA determines may reasonably be anticipated to result in increased human mortality or serious illness. It also

requires EPA to publish a list of hazardous air pollutants for which it plans to establish emission standards.

EPA has developed a multi-step process to review a potentially hazardous air pollutant before listing and regulating it. EPA identifies the potentially hazardous pollutant, analyzes the extent to which the public is exposed to the substance, and drafts a health assessment document which discusses the substance's health effects. EPA submits each health assessment document to its Science Advisory Board, which reviews and approves--or gives closure to the document. EPA then decides whether to include the substance on its list of hazardous air pollutants for regulatory action. This is known as "listing" a substance.

The Clean Air Act requires that EPA (1) propose emission standards to control the sources of a hazardous pollutant within 180 days after listing and (2) publish final standards within 180 days of proposal. The act requires such standards to be set at a level that provides "an ample margin of safety" to protect the public health.

IS EPA ADDRESSING THE MOST POTENTIALLY  
HAZARDOUS AIR POLLUTANTS?

EPA has identified and reported to the Congress 37 substances which it considers potentially hazardous air pollutants. These are substances that EPA believes generally represent priority candidates for possible regulation as hazardous pollutants. EPA plans to conduct exposure and health assessments on these substances to determine which should be

considered for possible regulation. These substances were derived from a list of 43 substances that EPA identified based on a 1976 contractor study of over 600 substances. Between 1977 and 1982, EPA refined the list to 37 by adding several substances and removing others determined to be nonhazardous either because they break down in the atmosphere or are produced in low volume.

EPA's development of a new procedure for screening and ranking potentially hazardous pollutants, however, raises questions about the priority and importance of some of the substances on the list of 37. Using the new procedure, EPA in 1982 ranked 184 substances, including 34 of those on the list of 37. Three of the 37 were not ranked because of their advanced stage of assessment. Only 18 of the 34 ranked among the top 37 in the new ranking and screening process. Several of the 37 ranked among the least potentially hazardous in the new process. Still, EPA considers the list of 37 important because of the emphasis given it by the Congress during its 1982 deliberations on the Clean Air Act, and as a result, EPA plans to conduct health assessments on all 37 substances.

Given the confusion created by the different rankings of potentially hazardous air pollutants and the overall delays, we believe EPA needs to (1) resolve the differences between the two rankings so that efforts can be directed to the most potentially hazardous chemicals and (2) develop a plan, giving consideration to its resource constraints, for conducting health assessments

and exposure analyses on substances in accordance with their priority ranking.

WHAT CIRCUMSTANCES HAVE LED TO  
DELAYS IN DRAFTING AND OBTAINING SAB  
CLOSURE ON HEALTH ASSESSMENT DOCUMENTS?

The development of health assessment documents has become a critical step in the decision as to whether to list a pollutant as hazardous. EPA will not make a regulatory decision on a substance until the SAB has reviewed and given closure to EPA's health assessment document on that substance.

In order to address SAB comments, EPA takes the time to make the necessary changes to obtain SAB closure. This often results in going back to SAB two or three times, thereby delaying the final document.

As of March 1983, EPA estimated that it had spent \$4.1 million developing health assessment documents on 23 substances, including 19 of the substances on the list of 37. EPA estimates that it should take 1 to 2 years to draft a health assessment document and 3 to 6 months to obtain SAB review and closure. EPA, however, has been working on some documents for 4 or 5 years without obtaining SAB closure. For example, EPA initiated a health assessment of perchloroethylene almost 5 years ago, and although SAB reviewed draft documents in 1980 and 1982, EPA has not yet been able to obtain SAB closure. EPA initiated a health assessment document for vinylidene chloride in December 1979 but has not yet presented it to SAB for review.

There are several reasons behind EPA's slowness in drafting health assessment documents and its difficulties in obtaining

SAB closure. EPA is unsure of the nature and adequacy of scientific information necessary to support a listing decision. SAB has disagreed with EPA over the sufficiency of data needed to demonstrate cancer-causing effects and over the best method to characterize a substance's potential adverse health effects.

Delays have also resulted from various policy shifts by EPA concerning the type of information to be included in the health assessment documents. For example, in 1980 EPA began shifting its emphasis from examining only the cancer-related health effects of a suspected hazardous air pollutant to analyzing all health effects. This shift resulted in EPA's spending significant time updating the content of health assessments. Extensive internal reviews have also contributed to delays in finalizing health assessment documents.

Furthermore, EPA's action on health assessments of five potentially hazardous air pollutants for which SAB had given oral conditional closure in December 1982 and April 1983 has been delayed because EPA will not take a regulatory action until it has received written closure from SAB. SAB will not send EPA a written letter of closure until SAB has received a finalized health assessment with SAB changes incorporated.

In January 1983 EPA developed an approach to accelerate the preparation of health assessment documents. The approach outlined a format for document content and established timetables for preparing about 40 health assessments. In fiscal year 1984 EPA received appropriation increases of \$1.1 million (or about 160 percent) for outside contractors and \$121,000 (or about 10 percent) for in-house work to intensify efforts to prepare

health assessment documents for hazardous air pollutants. It is too early to determine how effective this new approach will be.

With regard to the delays in obtaining SAB review and closure, it is difficult for us to make specific suggestions. Rather, we believe that EPA officials and the Chairman of SAB need to review the current process and reach mutual agreement on ways to facilitate more timely SAB review and closure of health assessment documents.

WHAT DELAYS HAS EPA EXPERIENCED IN  
SETTING STANDARDS AFTER SAB REVIEW?

As of October 1, 1983, EPA had obtained SAB written closure on the health assessment documents for two substances from the list of 37--cadmium and toluene. SAB gave closure to the cadmium document in September 1978 and the toluene document in September 1982, but EPA had not made a listing decision on either of them as of October 1, 1983.

EPA did not meet congressionally mandated deadlines to propose standards within 180 days of listing for three hazardous air pollutants--radionuclides, inorganic arsenic, and benzene. EPA also missed the 180-day deadline to promulgate standards after proposal for benzene.

According to the EPA office responsible for developing standards, the 180-day deadlines are impossible to meet because the process of proposing standards takes about 2 years to identify sources, obtain the technical and cost information from industry, and review the package within EPA. According to EPA, setting final standards takes at least 1 year because of the

time required to obtain and analyze public comments and obtain additional technical and cost data.

In 1982, the Sierra Club and the State of New York brought suit against EPA for not meeting the 180-day deadlines for radionuclides and inorganic arsenic. The courts determined that EPA should propose standards within 180 days of the decisions-- or by April 1983 for radionuclides and July 1983 for inorganic arsenic. To meet these court-imposed deadlines, EPA shifted resources away from other projects, and as a result, activities under section 112 and other sections of the act have been deferred. To avoid future legal problems caused by not proposing or promulgating standards within the 180-day time frame, EPA may be reluctant to list a pollutant until it has already prepared the proposed regulation package. This could delay the decision to list by at least several months.

DID CONGRESS INTEND ECONOMIC AND  
TECHNOLOGICAL FEASIBILITY TO BE  
RELEVANT CONSIDERATIONS WHEN SETTING  
STANDARDS UNDER SECTION 112?

When establishing standards for hazardous air pollutants, EPA has taken the position that, while it must focus primarily on health risks, it has considered economic and technological factors in adopting a regulatory control strategy.

While only the courts can solve definitively the scope of EPA's authority under section 112, we believe that based on our review of section 112, its legislative history, and applicable case law, the Congress intended that EPA establish standards at a level that eliminates significant public health risks. The Congress did not intend economic considerations and technological feasibility to be relevant considerations in

setting standards. This could require EPA to prohibit any emission of hazardous air pollutants if EPA cannot identify a threshold below which emissions would not be expected to cause adverse health effects.

We recognize the potentially severe economic consequences that may result from a "zero-emission" standard. However, in similar situations the courts have made clear that it is for the Congress to adjust the competing concerns of regulatory objectives and economic well-being.

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The chairman also asked us to (1) examine the extent to which EPA and SAB rely on contractors and consultants and (2) develop information on waivers of compliance that EPA can grant under section 112(c) of the Clean Air Act. Attachments I and II of my prepared statement provide a brief summary of work in each of these areas. At the Chairman's request, we have also prepared 2 charts which explain the process EPA has developed to list and regulate hazardous air pollutants. Mr. Chairman, this concludes my prepared statement. We would be glad to respond to your questions.

USE OF CONTRACTORS AND CONSULTANTSIN REGULATING HAZARDOUS AIR POLLUTANTS

EPA and SAB have used consultants and contractors extensively throughout the process of examining health effects and regulating hazardous air pollutants. EPA has used contractors to develop a new process for screening and ranking hazardous air pollutant candidates and to develop a list of chemicals to be considered in that ranking process. EPA is currently using two contractors to develop information for health assessments on several substances. EPA also uses consultants to help write and review health assessment documents. For example, EPA paid about \$10,000 to three consultants to help draft and about \$10,000 to five university professors and two consultants to review a health assessment document for methylene chloride.

SAB also uses consultants to supplement the members who review health assessment documents. For example, in 1982 the SAB paid seven consultants about \$10,000 in travel and compensation for reviewing health assessment documents for hazardous air pollutants.

After listing a substance as a hazardous air pollutant, EPA uses contractors when proposing, promulgating, or reviewing emission standards. According to EPA, use of contractors comprises about 60 to 70 percent of expenditures for proposing, promulgating, and reviewing emission standards for hazardous air pollutants. EPA spent about \$3 million on contractors to assist in the standard-setting process in fiscal years 1982 and 1983.

WAIVERS UNDER SECTION 112(C)  
OF THE CLEAN AIR ACT

According to section 112(c) of the Clean Air Act, existing sources have 90 days from the effective date of an emission standard before that standard applies. The section authorizes the EPA Administrator to grant a waiver of compliance allowing a source a period of up to 2 years to comply with the standards.

The EPA Administrator has delegated the waiver authority under section 112(c) to regional administrators. In February 1983, EPA further delegated waiver authority to those states willing to accept the program.

EPA headquarters was unable to provide us with national statistics on the number of waivers requested by sources and granted by EPA for the four pollutants regulated under section 112. EPA regional offices were also unable to supply us with complete information on the four pollutants. However, we were able to obtain information on vinyl chloride sources. Fifty-seven of 59 sources of vinyl chloride requested a waiver of compliance after the standards were established in 1976. We found no instances in which EPA denied a requested waiver although in some cases, EPA did limit the period of the waiver request.

According to EPA, fewer sources were affected by the beryllium and mercury standards and only a few waivers were requested for these pollutants. For example, in EPA's Region 6

(Dallas), 1 of 11 mercury sources and none of 3 beryllium sources requested waivers of compliance. EPA officials also said that, in general, there were more sources for asbestos than beryllium or mercury but that it would be difficult to develop statistics on the number of waivers for asbestos.

EPA regional and headquarters officials told us that the waiver process has worked well and that EPA has had little problem with the current practices under section 112(c).

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